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EXAMINER

STONE, JENNIFER A

ART UNIT PAPER NUMBER

2636

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No. 10/691,104	Applicant(s) BUCK ET AL.	
	Examiner Jennifer A Stone	Art Unit 2636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-9 and 11-20 is/are rejected.
- 7) ☒ Claim(s) 4, 5, and 10 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

Claim Rejections - 35 USC § 112

1. Claims 11 and 13 recites the limitation "said first processor" in lines 3 and 2, respectively. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 6, 8, 9, 11, 13-15, 18, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Schofield et al. (US 2003/0001734).

For claim 1, Schofield discloses a method of learning associations between a plurality of tires each having a unique identification (ID) code and a plurality of locations for tires, the method comprising the steps of, receiving the unique ID codes from each tire of the plurality of tires in response to a change in tire pressure in said each tire of the plurality of tires in response to a change in tire pressure in said each tire in a predetermined order of the plurality of locations for tires (parag 0058, Ins 7-25; Fig. 6A, items 120a-d, 122a-d), and correlating the receipt of the unique ID codes to the predetermined order of the plurality of locations for tires to thereby associate each tire of

the plurality of tires to one location of the plurality of locations for tires (parag 0053, Ins 1-8; parag 130, Ins 34-49).

For claim 2, the change in tire pressure is an operator-supplied change in tire pressure (parag 0058, Ins 15-20).

For claim 6, Schofield discloses the receiving step further comprises the step of communicating the receipt of said unique ID code to a user (parag 0005, Ins 13-16; parag 130, Ins 45-49).

For claim 8, each pressure detector further comprises a detector processor coupled to said transmitter and to said pressure sensor and configured to control said transmitter to transmit said unique ID code in response to a user-supplied signal (parag 0058, Ins 45-54 and 72-84). The microchip, which is part of the pressure sensors 120a-d is considered a processor because it generates an audible indication based upon the state of the inflation of the tire.

For claim 9, the user-supplied signal comprises a pressure change in said each tire, and wherein said pressure sensor is configured to provide an indication of the pressure change to said detector processor (parag 0058, Ins 45-54).

For claim 11, Schofield discloses at least one device for communicating with a human user, said at least one device coupled to and controlled by a first processor (Fig. 6A, items 123 and 118; parag 0058, Ins 1-12).

For claim 13, at least one device generates an indication that a first processor has been commanded to relearn said associations (parag 0130, Ins 16-25).

For claim 14, said transmitter coupled to each tire comprises a transmitter coupled to a valve stem of each tire (parag 0063, Ins 45-50).

For claim 15, the plurality of transmitters is equal to said plurality of tires (parag 0059; parag 0063, Ins 45-50). All tires on the vehicle will contain a stem valve, therefore, the quantity of transmitters (located on the stem valve) will equal the quantity of tires on the vehicle.

For claim 18, Schofield discloses a pressure monitor further configured to signal a user with pre-existing devices in the vehicle (parag 0062, Ins 11-14; Fig. 7).

For claim 20, Schofield discloses the step of manually initiating a mode change in said tire pressure monitor receiver, said mode change enabling said monitor to correlate said predetermined order of ID codes with a predetermined order of locations (parag 0051, Ins 14-35; parag 0053, Ins 1-6).

4. Claim 7 is rejected under 35 U.S.C. 102(e) as being anticipated by Porter et al. (US 6,745,624).

Porter discloses a tire pressure monitor system for a vehicle having a plurality of tires each mounted on a wheel at one of a plurality of locations relating to said vehicle, the tire pressure monitor system comprising: a plurality of tire pressure detectors each coupled to one of the plurality of wheels, each tire pressure detector further comprising (col 1, Ins 62-64): a transmitter having a unique ID code (col 4, Ins 26-32); and a pressure sensor configured to detect changes in the pressure in said one tire mounted on said wheel (col 4, Ins 5-8; Fig. 3, item 40); a receiver configured to receive said transmitted unique ID codes (Fig. 2A, item 42; col 3, Ins 59-63); a processor coupled to

said receiver (Fig. 2, items 42 and 16), wherein said processor is configured to respond to a user-supplied command to relearn associations between said ID codes and said locations by accepting said received ID codes in a predetermined order related to said locations (col 4, lns 34-39 and 50-65); and a memory coupled to said first processor, wherein said memory is configured to store each said ID code in associations with each respective location (Fig. 2, item 44; col 3, lns 63-65). The controller is considered a processor since it processes received serial numbers and associates the numbers with a tire location of the vehicle.

5. Claim 17 is rejected under 35 U.S.C. 102(e) as being anticipated by Schofield et al. (US 2003/0001734).

Schofield discloses an apparatus comprising an electronic automotive tire pressure monitor receiver configured to relearn associations between tire pressure transmitter ID codes and locations for vehicle tires based at least partially upon a user-supplied tire pressure change to each tire in a predetermined order (parag 0058, lns 10-25; parag 13-25).

6. Claim 19 is rejected under 35 U.S.C. 102(e) as being anticipated by McClelland et al. (US 6,710,708).

McClelland discloses a method of relearning associations between a plurality of tire pressure transmitters and a plurality of locations for tires (col 8, lns 41-49), the method comprising the step of inducing transmission of tire-specific ID codes to a tire pressure monitor receiver configured to store the ID codes correlated to the locations for tires by an operator manually interrogating, in a predetermined order, tire pressure

detectors at each location of the plurality of locations for tires (col 3, Ins 27-32 and 44-49; Figs. 2 and 6, item 12; col 6, Ins 28-34, 39-42, and 54-67; col 7, Ins 1-7).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schofield et al. (US 2003/0001734).

Schofield does not specifically disclose determining if a particular received unique ID code is a first unique ID code received; and if so, erasing existing correlated unique ID codes; however, as disclosed by Schofield, the above steps are obvious in updating or retraining a series of tires after a tire rotation. Schofield discloses replacing existing ID codes with updated ID codes after a tire rotation. It would have been obvious to one of ordinary skill in the art, at the time the invention was made to disclose the procedure of updating ID codes so that the procedure is written and stored into memory for future use.

9. Claims 12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schofield et al. as applied to claim 1 above, and further in view of Porter et al. (US 6,745,624).

For claim 12, Schofield does not disclose an indication that a unique ID code has been stored, however, Porter discloses this feature (col 4, lns 50-54 and 60-63). It would have been obvious to provide indication to a user of successfully storing an ID code to prompt a user to move to the next tire, as disclosed by Porter.

For claim 16, Schofield does not disclose a particular predetermined order of plurality of tire locations, however, Porter discloses a vehicle that has four wheels and a predetermined order consisting of the sequence left front, right front, right rear, and left rear (col 4, lns 50-56). It would have been obvious to disclose a particular sequence so that a user establishes a routine for transmitting tire ID data conducive to effective time management.

Allowable Subject Matter

10. Claims 4, 5, and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Knapp (US 2003/0128108) discloses a change in tire pressure or a predetermined sequence of tire rotation that prompts transmission of tire data to a receiver.

Dixit et al. (US 6,414,592) discloses a manual device for transmitting tire ID codes to a receiver; the receiver learns ID codes with respective tire locations.

Newman (US 6,750,761) discloses transmitting sensor ID data paired with a tire location data to a central receiver.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Stone whose telephone number is (571) 272.2976. The examiner can normally be reached 8:00-4:30, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Jeffery Hofsass can be reached at (571) 272.2981. The fax phone number for the organization where this application or proceeding is assigned is (703) 872.9306 for regular and after final communications.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272.2600.

Jennifer Stone
March 17, 2005



JEFFERY HOFSSASS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600